



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,529	03/10/2004	Petteri Poyhonen	042933/271454	4521
826 7590 08/27/2008				
ALSTON & BIRD LLP				
BANK OF AMERICA PLAZA				
101 SOUTH TRYON STREET, SUITE 4000				
CHARLOTTE, NC 28280-4000				
EXAMINER				
PHAN, TRI H				
ART UNIT		PAPER NUMBER		
2616				
MAIL DATE		DELIVERY MODE		
08/27/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/797,529

**Applicant(s)**

POYHONEN ET AL.

**Examiner**

TRI H. PHAN

**Art Unit**

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment/Arguments*

1. This Office Action is in response to the Response/Amendment filed on May 16<sup>th</sup>, 2008.  
Claims 1-59 are now pending in the application.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2,4-6, 11-13, 14-17, 18-19,21-23,28-30,32-34,35-36,38-40,45-47, 49-51, 52-54, 56, and 58-59 are rejected under 35 U.S.C. 102(e) as being anticipated by **Parker et al.** (US 6,690,407 B1; hereinafter refer as 'Parker').

- Regarding claim 1, Parker discloses a system comprises

an originating node (fig 4 block 10, user # 1) configured to initiate communication with a terminating node (fig 4 block 10, user #2); and

an intermediate node located between the originating node and the terminating node (fig 4 block 13, central server, switches or routers),

wherein the originating node is configured to initiate communication with the terminating node in a manner based upon at least one parameter for communication with at least one of the intermediate node or the terminating node (column 5 lines 53-59, connection setup ), wherein the originating node is configured to initiate communication by requesting communication with the terminating node via the intermediate node (column 5 lines 30-33, central server router perform connection setup), or notifying the terminating node of incoming data independent of the intermediate node (column 5 lines 56-63, notifying the terminating node and data exchange independent from central server), wherein the originating node or the intermediate node is configured to notify the terminating node of incoming data when the originating node initiates communication by requesting communication with the terminating node via the intermediate node (column 5 lines 37-46, connection setup to intermediate node), and wherein the terminating node, upon being notified of incoming data, is configured to register with the intermediate node to thereby enable Internet Protocol IP communication between the originating node and the terminating node via the intermediate node (column 4 lines 58-60, user registered).

- In regard to claim 2, Parker further discloses, wherein the originating node is configured to notify the terminating node of incoming data further in accordance with a non-IP-based communication technique when the originating node initiates communication by notifying the terminating node of incoming data, and wherein the originating node or the intermediate node is configured to notify the terminating node of incoming data further in accordance with a non-IP-

based communication technique when the originating node initiates communication by requesting communication with the terminating node via the intermediate node (fig 4 blocks 10 & 11; and column 7 lines 5-11, direct packet exchange for non-IP based).

- Regarding claim 4, Parker further discloses, wherein the originating node is configured to notify the terminating node of incoming data further in accordance with at least one wireless communication technique when the originating node initiates communication by notifying the terminating node of incoming data, and wherein the originating node or the intermediate node is configured to notify the terminating node of incoming data further in accordance with the at least one wireless communication technique when the originating node initiates communication by requesting communication with the terminating node via the intermediate node (column 4 lines 33-67, the technique is applied for plurality telecommunication including mobile communication).

- In regard to claim 5, Parker further discloses, wherein the originating node is configured to initiate communication, and thereafter communicate, with the terminating node in accordance with a plurality of different communication techniques (see fig 1, 2, 3, 4, 5 & 8, for different communication techniques).

- Regarding claim 6, Parker further discloses, wherein the originating node is configured to request communication with the terminating node via the intermediate node sending a domain name service DNS query to at least one of a plurality of DNS servers to thereby trigger the at

least one of a plurality of DNS servers to communicate with the intermediate node to request communication with the terminating node (column 4 lines 5-19, DNS servers).

- In regard to claim 11, Parker further discloses, wherein the terminating node is configured to register with the intermediate node to thereby enable the intermediate node to create a registration entry that includes a public IP address assigned to the terminating node, and wherein the originating node is configured to communicate with the terminating node to thereby enable the intermediate node to operate as a proxy based upon the registration entry (column 2, lines 20-32. assigning a public IP address).

- Regarding claim 12, Parker further discloses, wherein the public IP address assigned to the terminating node comprises a public IP address assigned to the terminating node by a network address translator NAT, wherein the intermediate node is configured to receive data from the originating node, and forwarding the data based upon the public IP address to thereby enable the NAT to transform the public IP address assigned to the terminating node into a private IP address associated with the terminating node, and thereafter forward the data from the NAT to the terminating node based upon the private IP address of the terminating node (column 2, lines 20-32. assigning a public IP address).

- In regard to claim 13, Parker further discloses, wherein the originating node comprises a mobile terminal or a fixed terminal, and wherein the mobile terminal or fixed terminal is

configured to notify the terminating node of incoming data (column 4 lines 33-67, notification to the user).

- Regarding claim 15, Parker further discloses, at least one of a network address translator NAT or a firewall FW located between the intermediate node and the terminating node, wherein the originating node and the intermediate node is configured to communicate with the at least one of the NAT or FW to thereby trigger the at least one of the NAT or FW to notify the terminating node of incoming data (column 5 lines 29-52, NAT and FW at the intermediate node and terminating node).

- In regard to claim 16, Parker further discloses, wherein the originating node or the intermediate node is configured to communicate with the at least one of the NAT or FW to thereby enable the at least one of the NAT or FW to communicate with a network gateway support node to thereby trigger the network gateway support node to notify the terminating node of incoming data (column 5 lines 29-52, NAT and FW at the intermediate node and terminating node).

- Regarding claim 17, Parker further discloses, wherein the originating node or the intermediate node is configured to communicate with another network node to thereby trigger the other network node to notify the terminating node of incoming data (column 5 lines 56-63, notifying the terminating node and data exchange independent from central server).

- In regard to claim 18, Parker discloses a method, which comprises receiving a notification of incoming data at a terminating node from an originating node or an intermediate node located between the originating node and the terminating node; and registering the terminating node with the intermediate node in response to receiving the notification at the terminating node to thereby enable Internet Protocol IP communication between the originating node and the terminating node via the intermediate node (column 4 lines 5-19, DNS servers; and fig 3 blocks 10, 13 & 11, communication setup).

- Regarding claim 19, Parker further discloses, wherein notifying the terminating node comprises notifying the terminating node of incoming data further in accordance with a non-IP-based communication technique (fig 4 blocks 10 & 11; and column 7 lines 5-11, direct packet exchange for non-IP based).

- In regard to claim 21, Parker further discloses, wherein notifying the terminating node comprises notifying the terminating node of incoming data further in accordance with at least one wireless communication technique (column 4 lines 33-67, the technique is applied for plurality telecommunication including mobile communication).

- Regarding claim 22, Parker further discloses communicating between the originating node and the terminating node, wherein notifying the terminating node and communicating between the originating node and terminating node occur in accordance with a plurality of



different communication techniques (see fig 1, 2, 3, 4, 5 & 8, for different communication techniques).

- In regard to claim 23, Parker further discloses, requesting communication with the terminating node from the originating node via the intermediate node by sending a domain name service DNS query to at least one of a plurality of DNS servers to thereby trigger the at least one of a plurality of DNS servers to communicate with the intermediate node to thereby enable the intermediate node to notify the terminating node of incoming data (column 4 lines 5-19, DNS servers; and fig 3 blocks 10, 13 & 11, communication setup)..

- Regarding claim 28, Parker further discloses, wherein registering the terminating node comprises registering the terminating node to thereby enable the intermediate node to create a registration entry that includes a public IP address assigned to the terminating node, and wherein the method further comprises

communicating between the originating node and the terminating node via the intermediate node to thereby enable the intermediate node operates as a proxy based upon the registration entry (column 4 lines 58-60 and fig 3, user registered).

- In regard to claim 29, Parker further discloses, wherein the public IP address assigned to the terminating node comprises a public IP address assigned to the terminating node by a network address translator NAT, and wherein communicating comprises receiving data from the originating node at the intermediate node; and forwarding the data based upon the public IP

address to thereby enable the NAT is configured to transform the public IP address assigned to the terminating node into a private IP address associated with the terminating node, and thereafter forwarding the data from the NAT to the terminating node based upon the private IP address of the terminating node (column 2, lines 20-32. assigning a public IP address).

- Regarding claim 30, Parker further discloses, wherein the originating node comprises a mobile terminal or a fixed terminal, and wherein receiving a notification comprises receiving a notification from the mobile terminal or fixed terminal (column 4 lines 33-67, the technique is applied for plurality telecommunication including mobile communication; and column 5 lines 53-59, connection setup).

- In regard to claim 32, Parker further discloses, wherein receiving a notification comprises receiving a notification from at least one of a network address translator NAT or a firewall FW located between the intermediate node and the terminating node, and wherein receiving a notification comprises receiving a notification in response to the at least one of the NAT or FW being triggered by the originating node or the intermediate node to notify the terminating node of incoming data (column 5 lines 29-52, NAT and FW at the intermediate node and terminating node).

- Regarding claim 33, Parker further discloses, wherein receiving a notification comprises receiving a notification from a network gateway support node in response to the network gateway support node being triggered by at least one of the NAT or FW to notify the terminating

node of incoming data (column 5 lines 29-52, NAT and FW at the intermediate node and terminating node).

- In regard to claim 34, Parker further discloses, wherein receiving a notification comprises receiving a notification from another network node in response to the other network node being triggered by the originating node or the intermediate node to notify the terminating node of incoming data (column 5 lines 56-63, notifying the terminating node and data exchange independent from central server).

- Regarding claim 35, Parker discloses an apparatus which comprises a controller (see fig. 3) configured to receive a notification of incoming data from an originating node or an intermediate node located between the originating node and the apparatus (column 5 lines 53-59, connection setup ), wherein the controller is also configured to register the apparatus with the intermediate node in response to receiving the notification to thereby enable Internet Protocol IP communication between the originating node and the apparatus via the intermediate node (column 4 lines 58-60 and fig 3, user registered).

- In regard to claim 36, Parker further discloses, wherein the controller is configured to receive the notification further in accordance with a non-IP-based communication technique (column 4 lines 58-60 and fig 3, user registered).

- Regarding claim 38, Parker further discloses, wherein the controller is configured to receive the notification further in accordance with at least one wireless communication technique (column 4 lines 33-67, the technique is applied for plurality telecommunication including mobile communication).

- In regard to claim 39, Parker further discloses, wherein the controller is further configured to communicate with the originating node, and wherein the controller is configured to receive the notification and communicate with the originating node in accordance with a plurality of different communication techniques (see fig 1, 2, 3, 4, 5 & 8, for different communication techniques).

- Regarding claim 40, Parker further discloses, wherein the controller is configured to receive the notification in response to the originating node requesting communication with the apparatus via the intermediate node by sending a domain name service DNS query to at least one of a plurality of DNS servers to thereby trigger the at least one of a plurality of DNS servers to communicate with the intermediate node to thereby enable the intermediate node to send the notification to the apparatus (column 4 lines 5-19, DNS servers; and fig 3 blocks 10, 13 & 11, communication setup).

- In regard to claim 45, Parker further discloses, wherein the controller is configured to register the apparatus to thereby enable the intermediate node to create a registration entry that includes a public IP address assigned to the apparatus (column 2, lines 20-32. assigning a public

IP address), and wherein the controller is configured to communicate with the originating node via the intermediate node to thereby enable the intermediate node to operate as a proxy based upon the registration entry (column 4 lines 58-60 and fig 3, user registered).

- Regarding claim 46, Parker further discloses, wherein the public IP address assigned to the apparatus comprises a public IP address assigned to the apparatus by a network address translator NAT, and wherein the controller is configured to communicate with the originating node to thereby enable the intermediate node to receive data from the originating node, and forward the data based upon the public IP address to thereby enable the NAT is configured to transform the public IP address assigned to the apparatus into a private IP address associated with the {terminal} apparatus, and thereafter forward the data from the NAT to the controller based upon the private IP address of the apparatus (column 5 lines 29-52).

- In regard to claim 47, Parker further discloses, wherein the originating node comprises a mobile apparatus or a fixed apparatus, and wherein the controller is configured to receive the notification from the mobile apparatus or fixed apparatus (column 4 lines 33-67, the technique is applied for plurality telecommunication including mobile communication).

- Regarding claim 49, Parker further discloses, wherein the controller is configured to receive the notification from at least one of a network address translator NAT or a firewall FW located between the intermediate node and the apparatus, and wherein the controller is configured to receive the notification in response to the at least one of the NAT or FW being

Art Unit: 2616

triggered by the originating node or the intermediate node to notify the apparatus of incoming data (column 5 lines 29- 52, NAT and FW at the intermediate node and terminating node).

- In regard to claim 50, Parker further discloses, wherein the controller is configured to receive the notification from a network gateway support node in response to the network gateway support node being triggered by at least one of the NAT or FW to notify the apparatus of incoming data (column 5 lines 29-52, NAT and FW at the intermediate node and terminating node).

- Regarding claim 51, Parker further discloses, wherein the controller is configured to receive the notification from another network node in response to the other network node being triggered by the originating node or the intermediate node to notify the apparatus of incoming data (column 5 lines 1-28).

- In regard to claim 52, Parker discloses a system, which comprises a network address translator NAT (gateway) located between an originating node and a terminating node, wherein the NAT is configured to receive a communication request from a network node, and in response to the connection request, notify the terminating node of incoming data to thereby enable the terminating node to register with an intermediate node located between the originating node and the NAT to thereby enable Internet Protocol IP communication between the originating node and the terminating node via the intermediate node (column 5 lines 28-52, connection setup with NAT address, intermediate node and user nodes).

- Regarding claim 53, Parker further discloses, wherein the NAT is configured to notify the terminating node via a network gateway support node of a network including the terminating node (fig 2 blocks 10, 13, 14 and 11).

- In regard to claim 54, Parker further discloses, wherein the NAT is configured to receive the communication request from the originating node or the intermediate node (fig 2 blocks 10, 13, 14 and 11).

- Regarding claim 58, Parker further discloses, an intermediate node configured to receive a registration message from the terminating node, and thereafter create a registration entry that includes a public IP address assigned to the terminating node, wherein the intermediate node is configured to operate as a proxy during communication between the originating node and the terminating node based upon the registration entry (column 5 lines 28-52, connection setup with NAT address, intermediate node and user nodes column 4 lines 58-60, user registered).

- In regard to claim 59, Parker discloses an apparatus which comprises  
a receiving means for receiving a notification of incoming data from an originating node or an intermediate node located between the originating node and the apparatus (column 5 lines 53-59, connection setup); and

a registering means for registering the apparatus with the intermediate node in response to the receiving means receiving the notification to thereby enable Internet Protocol IP

communication between the originating node and the apparatus via the intermediate node (column 5 lines 28-52, connection setup with NAT address, intermediate node and user nodes column 4 lines 58-60, user registered).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 7-10, 14, 20, 24-27, 31, 37, 41-44, 48, 55 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Parker et al.** (US 6,690,407 B1) in view of **Amin et al.** (US 6,910,074; hereinafter refer as ‘**Amin**’)

- In regard to claim 3, Parker discloses, the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein non-IP based communication comprises at least one of oral communication, text messaging, radio frequency RF communication, short messaging service SMS communication, multimedia messaging service MMS communication, or instant messaging. Amin et al from the same or similar field of endeavor, teach wherein non-IP based communication comprises at least one of oral communication, text messaging, radio frequency RF communication, short messaging service SMS communication, multimedia messaging service MMS communication or instant messaging (column 7 lines 57-59, establish SMS or multimedia service).



Thus, it would have been obvious to someone of ordinary skill the art to combine the used of establish SMS or multimedia service of Amin el al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the establish SMS or multimedia service is implemented as hardware, software or as firmware solutions of Amin el al into with telecommunications over IP of Parker et al.

The rationale to combine the used of establish SMS or multimedia service of Amin el al with the telecommunications over IP of Parker et al is that, it provides a technique to text message and multimedia service through the telecommunications network.

- Regarding claim 7, Parker teaches the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein the originating node is configured to send the DNS query to a first DNS server, wherein a second DNS server communicates with the intermediate node to request communication with the terminating node, and wherein the second DNS server comprises the first DNS server or a DNS server different from the first DNS server.

Amin el al from the same or similar field of endeavor, teach wherein the originating node is configured to send the DNS query to a first DNS server, wherein a second DNS server communicates with the intermediate node to request communication with the terminating node, and wherein the second DNS server comprises one of the first DNS server and a DNS server different from the first DNS server (column 19 lines 3-12, DNS performs a lookup).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of DNS lookup service of Amin el al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the DNS lookup service is implemented as

hardware, software or as firmware solutions of Amin el al into with telecommunications over IP of Parker et al.

The rationale to combine the used of DNS lookup service of Amin el al with the telecommunications over IP of Parker et al is that, it provides a technique of directory service through the telecommunications network.

- In regard to claim 8, Parker teach the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein the intermediate node is configured to establish a tunnel with the terminating node in response to the terminating node registering with the intermediate node, and wherein the originating node is configured to communicate with the terminating node at least partially via the tunnel.

Amin el al from the same or similar field of endeavor, teach wherein the intermediate node is configured to establish a tunnel with the terminating node in response to the terminating node registering with the intermediate node, and wherein the originating node is configured to communicate with the terminating node at least partially via the tunnel (column 5 lines 59-67; and column 8 lines 9- 23, tunneling and IP centric distributed network).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of DNS lookup service of Amin el al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the tunneling and IP centric distributed network is implemented as hardware, software or as firmware solutions of Amin el al into with telecommunications over IP of Parker et al.

The rationale to combine the tunneling and IP centric distributed network of Amin et al with the telecommunications over IP of Parker et al is that, it provides a technique of tunneling and distributed data service through the telecommunications network.

- Regarding claim 9, Parker further discloses, wherein the intermediate node is further configured to assign a public IP address to the terminating node, and wherein the originating node is configured to communicate with the terminating node by sending data based upon the public IP address of the terminating node assigned by the intermediate node (column 2, lines 20-32. assigning a public IP address).

- In regard to claim 10, Parker further discloses, wherein the intermediate node is configured to establish the tunnel based upon a registration message from the terminating node via at least one of a network address translator NAT or a firewall FW located between the intermediate node and the terminating node, and wherein the originating node is configured to communicate with the terminating node at least partially via the tunnel in a manner independent of the at least one of the NAT or the FW (column 5 lines 29-52, NAT and FW at the intermediate node and terminating node).

- Regarding claim 14, Parker teach the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein the originating node or the intermediate node comprises a Session Initiation Protocol SIP client, and wherein the SIP client is configured to communicate

with a SIP proxy to thereby trigger the SIP proxy to notify the terminating node of incoming data.

Amin el al from the same or similar field of endeavor, teach wherein the originating node or the intermediate node comprises a Session Initiation Protocol SIP client, and wherein the SIP client is configured to communicate with a SIP proxy to thereby trigger the SIP proxy to notify the terminating node of incoming data (column 15 lines 20-39; SIP application provides protocol services to the end users).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of SIP application of Amin el al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the SIP application is implemented as hardware, software or as firmware solutions of Amin el al into with telecommunications over IP of Parker et al.

The rationale to combine the SIP application of Amin el al with the telecommunications over IP of Parker et al is that, it provides a technique of application-layer control protocol for creating, modifying and terminating session service through the telecommunications network.

- In regard to claim 20, Parker et al teach the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein notifying the terminating node comprises notifying the terminating node of incoming data further in accordance with at least one of oral communication, text messaging, radio frequency RF communication, short messaging service SMS communication, multimedia messaging service MMS communication or instant messaging.

Amin et al from the same or similar field of endeavor, teach wherein notifying the terminating node comprises notifying the terminating node of incoming data further in accordance with at least one of oral communication, text messaging, radio frequency RF communication, short messaging service SMS communication, multimedia messaging service MMS communication or instant messaging (column 7 lines 57-59, establish SMS or multimedia service).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of establish SMS or multimedia service of Amin et al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the establish SMS or multimedia service is implemented as hardware, software or as firmware solutions of Amin et al into with telecommunications over IP of Parker et al.

The rationale to combine the used of establish SMS or multimedia service of Amin et al with the telecommunications over IP of Parker et al is that, it provides a technique to text message and multimedia service through the telecommunications network.

- Regarding claims 24 and 37, Parker teach the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein requesting communication comprises requesting communication with the terminating node from the originating node via the intermediate node by sending a DNS query to a first DNS server to thereby trigger a second DNS server to communicate with the intermediate node to thereby enable the intermediate node to notify the terminating node of incoming data, and wherein the second DNS server comprises the first DNS server or a DNS server different from the first DNS server.

Amin et al from the same or similar field of endeavor, teach wherein requesting communication comprises requesting communication with the terminating node from the originating node via the intermediate node by sending a DNS query to a first DNS server to thereby trigger a second DNS server to communicate with the intermediate node to thereby enable the intermediate node to notify the terminating node of incoming data, and wherein the second DNS server comprises the first DNS server or a DNS server different from the first DNS server. (column 19 lines 3-12, DNS performs a lookup).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of DNS lookup service of Amin et al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the DNS lookup service is implemented as hardware, software or as firmware solutions of Amin et al into with telecommunications over IP of Parker et al.

The rationale to combine the used of DNS lookup service of Amin et al with the telecommunications over IP of Parker et al is that, it provides a technique of directory service through the telecommunications network.

- In regard to claim 25, Parker teach the entire claimed invention, as recited in paragraph 2 of this office action, except for establishing a tunnel between the intermediate node and the terminating node in response to registering the terminating node with the intermediate node; and communicating between the originating node and the terminating node at least partially via the tunnel.

Amin el al, from the same or similar field of endeavor, further teaches establishing a tunnel between the intermediate node and the terminating node in response to registering the terminating node with the intermediate node; and communicating between the originating node and the terminating node at least partially via the tunnel (column 5 lines 59-67; and column 8 lines 9-23, tunneling and IP centric distributed network).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of DNS lookup service of Amin el al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the tunneling and IP centric distributed network is implemented as hardware, software or as firmware solutions of Amin el al into with telecommunications over IP of Parker et al.

The rationale to combine the tunneling and IP centric distributed network of Amin el al with the telecommunications over IP of Parker et al is that, it provides a technique of tunneling and distributed data service through the telecommunications network.

- Regarding claim 26, Parker further discloses, wherein registering the terminating node includes assigning a public IP address to the terminating node, and wherein communicating comprises sending data from the originating node to the terminating node based upon the public IP address assigned to the terminating node (column 2, lines 20-32. assigning a public IP address).

- In regard to claim 27, Parker further discloses, wherein establishing a tunnel comprises establishing a tunnel based upon a registration message from the terminating node via at least

one of a network address translator NAT or a firewall FW located between the intermediate node and the terminating node, and wherein communicating comprises communicating between the originating node and the terminating node at least partially via the tunnel in a manner independent of the at least one of the NAT or the FW (column 5 lines 29-52, NAT and FW at the intermediate node and terminating node).

- Regarding claim 31, Parker teach the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein the originating node or the intermediate node comprises a Session Initiation Protocol SIP client, and wherein receiving a notification comprises receiving a notification from a SIP proxy in response to the SIP proxy being triggered by the SIP client to notify the terminating node of incoming data.

Amin el al from the same or similar field of endeavor, teach wherein the originating node or the intermediate node comprises a Session Initiation Protocol SIP client, and wherein receiving a notification comprises receiving a notification from a SIP proxy in response to the SIP proxy being triggered by the SIP client to notify the terminating node of incoming data (column 15 lines 20-39; SIP application provides protocol services to the end users).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of SIP application of Amin el al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the SIP application is implemented as hardware, software or as firmware solutions of Amin el al into with telecommunications over IP of Parker et al.



The rationale to combine the SIP application of Amin et al with the telecommunications over IP of Parker et al is that, it provides a technique of application-layer control protocol for creating, modifying and terminating session service through the telecommunications network.

- In regard to claim 41, Parker teach the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein the controller is configured to receive the notification in response to the originating node requesting communication comprises requesting communication with the terminating node via the intermediate node by sending the DNS query to a first DNS server to thereby trigger a second DNS server to communicate with the intermediate node to thereby enable the intermediate node to notify the terminating node of incoming data, and wherein the second DNS server comprises one of the first DNS server or a DNS server different from the first DNS server.

Amin et al from the same or similar field of endeavor, teach wherein the controller is configured to receive the notification in response to the originating node requesting communication comprises requesting communication with the terminating node via the intermediate node by sending the DNS query to a first DNS server to thereby trigger a second DNS server to communicate with the intermediate node to thereby enable the intermediate node to notify the terminating node of incoming data, and wherein the second DNS server comprises one of the first DNS server or a DNS server different from the first DNS server. (column 19 lines 3-12, DNS performs a lookup).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of DNS lookup service of Amin et al with the telecommunications over IP of Parker et al at

the time of the invention. The method of using the DNS lookup service is implemented as hardware, software or as firmware solutions of Amin el al into with telecommunications over IP of Parker et al.

The rationale to combine the used of DNS lookup service of Amin el al with the telecommunications over IP of Parker et al is that, it provides a technique of directory service through the telecommunications network.

- Regarding claim 42, Parker teach the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein the controller is configured to register the apparatus to thereby enable the intermediate node to establish a tunnel between the intermediate node and the apparatus in response to registering the apparatus with the intermediate node, and wherein the controller is configured to communicate with the originating node at least partially via the tunnel.

Amin el al from the same or similar field of endeavor, teach wherein the controller is configured to register the apparatus to thereby enable the intermediate node to establish a tunnel between the intermediate node and the apparatus in response to registering the apparatus with the intermediate node, and wherein the controller is configured to communicate with the originating node at least partially via the tunnel (column 5 lines 59-67; and column 8 lines 9-23, tunneling and IP centric distributed network).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of DNS lookup service of Amin el al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the tunneling and IP centric distributed network is

implemented as hardware, software or as firmware solutions of Amin et al into with telecommunications over IP of Parker et al.

The rationale to combine the tunneling and IP centric distributed network of Amin et al with the telecommunications over IP of Parker et al is that, it provides a technique of tunneling and distributed data service through the telecommunications network.

- In regard to claim 43, Parker further discloses, wherein the controller is configured to register the apparatus to thereby enable the intermediate node to assign a public IP address to the apparatus, and wherein the controller is configured to receive data sent from the originating node to the apparatus based upon the public IP address assigned to the apparatus (column 2, lines 20-32, assigning a public IP address).

- Regarding claim 44, Parker further discloses, wherein the controller is configured to send a registration message to the intermediate node via at least one of a network address translator NAT or a firewall FW located between the intermediate node and the apparatus to thereby register the apparatus, and wherein the controller is configured to communicate with the originating node at least partially via the tunnel in a manner independent of the at least one of the NAT or the FW (column 5 lines 29-52, NAT and FW at the intermediate node and terminating node).

- In regard to claim 48, Parker teaches the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein the originating node or the intermediate

node comprises a Session Initiation Protocol SIP client, and wherein the controller is configured to receive the notification from a SIP proxy in response to the SIP proxy being triggered by the SIP client to notify the apparatus of incoming data.

Amin et al from the same or similar field of endeavor, teach wherein the originating node or the intermediate node comprises a Session Initiation Protocol SIP client, and wherein the controller is configured to receive the notification from a SIP proxy in response to the SIP proxy being triggered by the SIP client to notify the apparatus of incoming data (column 15 lines 20-39; SIP application provides protocol services to the end users).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of SIP application of Amin et al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the SIP application is implemented as hardware, software or as firmware solutions of Amin et al into with telecommunications over IP of Parker et al.

The rationale to combine the SIP application of Amin et al with the telecommunications over IP of Parker et al is that, it provides a technique of application-layer control protocol for creating, modifying and terminating session service through the telecommunications network.

- Regarding claim 55, Parker teaches the entire claimed invention, as recited in paragraph 2 of this office action, except for further comprising an intermediate node configured to establish a tunnel with the terminating node in response to the terminating node registering with the intermediate node to thereby enable the originating node is configured to communicate with the terminating node at least partially via the tunnel.

Amin et al from the same or similar field of endeavor, teach further comprising an intermediate node configured to establish a tunnel with the terminating node in response to the terminating node registering with the intermediate node to thereby enable the originating node is configured to communicate with the terminating node at least partially via the tunnel (column 5 lines 59-67; and column 8 lines 9-23, tunneling and IP centric distributed network).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of DNS lookup service of Amin et al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the tunneling and IP centric distributed network is implemented as hardware, software or as firmware solutions of Amin et al into with telecommunications over IP of Parker et al.

The rationale to combine the tunneling and IP centric distributed network of Amin et al with the telecommunications over IP of Parker et al is that, it provides a technique of tunneling and distributed data service through the telecommunications network.

- In regard to claim 56, Parker further discloses, wherein the intermediate node is further configured to assign a public IP address to the terminating node to thereby enable the originating node is configured to communicate with the terminating node by sending data based upon the public IP address of the terminating node assigned by the intermediate node (column 5 lines 29-52).

- Regarding claim 57, Parker teaches the entire claimed invention, as recited in paragraph 2 of this office action, except for wherein the intermediate node is configured to establish the

tunnel based upon a registration message from the terminating node via the NAT, and wherein the intermediate node is configured to establish a tunnel with the terminating node to permit the originating node to communicate with the terminating node at least partially via the tunnel in a manner independent of the NAT.

Amin el al from the same or similar field of endeavor, teaches wherein the intermediate node is configured to establish the tunnel based upon a registration message from the terminating node via the NAT, and wherein the intermediate node is configured to establish a tunnel with the terminating node to permit the originating node to communicate with the terminating node at least partially via the tunnel in a manner independent of the NAT (column 5 lines 59-67; and column 8 lines 9-23, tunneling and IP centric distributed network).

Thus, it would have been obvious to someone of ordinary skill the art to combine the used of DNS lookup service of Amin el al with the telecommunications over IP of Parker et al at the time of the invention. The method of using the tunneling and IP centric distributed network is implemented as hardware, software or as firmware solutions of Amin el al into with telecommunications over IP of Parker et al.

The rationale to combine the tunneling and IP centric distributed network of Amin el al with the telecommunications over IP of Parker et al is that, it provides a technique of tunneling and distributed data service through the telecommunications network.

***Response to Amendment/Arguments***

6. Applicant's arguments filed on May 16<sup>th</sup>, 2008 have been fully considered but they are not persuasive.

In the REMARKS, pages 16-18, Applicant mainly argues that Parker fails to disclose "..., whereby the terminating node, upon being notified of incoming data, is configured to register with the intermediate node to thereby enable Internet Protocol IP communication between the originating node and the terminating node via the intermediate node". Examiner respectfully disagrees. Parker discloses wherein the user, e.g. "terminating node", browses by commercial and private entities for exchange data over the Internet for its current session, e.g. "upon being notified of incoming data", is configured to register with the DNS, e.g. "intermediate node", to receive a temporarily assigned IP address for exchanging data with server over the Internet as specified in col. 2, lines 20-32; with secure and billing processes as disclosed in col. 4, lines 42-53. Therefore, Examiner concludes that Parker teaches the arguable feature.

Claims 1-2,4-6, 11-13, 14-17, 18-19,21-23,28-30,32-34,35-36,38-40,45-47, 49-51, 52-54, 56, and 58-59 are rejected as in Part 3 above of this Office action and by virtue of their dependence from claims 1, 18, 35, 52 and 59.

Claims 3, 7-10, 14, 20, 24-27, 31, 37, 41-44, 48, 55 and 57 are rejected as in Part 5 above of this Office action and by virtue of their dependence from claims 1, 18, 35, 52 and 59.

### ***Conclusion***

7. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR



Art Unit: 2616

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Chi H Pham/

Supervisory Patent Examiner, Art Unit

2616

8/25/08

/Tri H. Phan/

Examiner, Art Unit 2616

August 26, 2008